

EPARTMENT OF COMMERCE United States Pagent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		AT	TORNEY DOCKET NO.
09/266,936	03/12/9	9 SILENIUS		P	1562.0110000
·			٦	EXAMINER	
		IM22/0717	·	VOUED_	12
STERNE, KESSLER, GOLDSTEIN & FOX				ART UNIT	PAPER NUMBER
1100 NEW YORK AVENUE N.W. WASHINGTON DC 20005-3934				1773 DATE MAILED:	//
					07/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/266.936

Applicant(s)

Silenius P.

Examiner

Kevin Kruer

Art Unit 1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 1) Responsive to communication(s) filed on May 25, 2001 2b) This action is non-final. 2a) X This action is FINAL. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. **Disposition of Claims** is/are pending in the application. 4) 💢 Claim(s) 1-16 4a) Of the above, claim(s) ______ is/are withdrawn from consideration. is/are allowed. 5) Claim(s) 6) X Claim(s) 1-16 is/are rejected. is/are objected to. 7) Claim(s) are subject to restriction and/or election requirement. 8) Claims ____ Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are objected to by the Examiner. 11) ☐ The proposed drawing correction filed on ______ is: a) ☐ approved b) ☐ disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) ☑ All b) ☐ Some* c) ☐ None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 18) Interview Summary (PTO-413) Paper No(s). _ 15) X Notice of References Cited (PTO-892) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 10 20) Other:

Art Unit: 1773

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

- 2. Claims 5 (1-4) are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, the specification states that fine paper is wood free. Thus, claim 5 does not further limit claim 1.
- 3. Claims 10 (1-4) are to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, calcium oxalates are monohydrates (see the definition in the McGraw-Hill Dictionary of Chemical Terms). Thus, claim 10 does not further limit claim 1.

Claim Rejections - 35 USC § 112

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. NOTE: for the remainder of the prosecution of this application, the term "wood-free" will be understood to mean a "pulp furnish without mechanical pulp."

Art Unit: 1773

- 6. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "fine paper" is indefinite. Specifically, Exhibit 1 (aka the "Paper Dictionary" supplied by Applicant) defines "fine paper" as an uncoated paper. However, Applicant claims a paper that may comprise coating pigment (aka a coated paper).
- 7. Claims 2 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Its unclear upon what physical property the percentage is based (ie, weight?, volume?).
- 8. Claim 3 recites the limitation "said calcium carbonate" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.
- 9. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "wood-containing" is indefinite. The examiner takes the position that the term has neither been defined clearly in the disclosure nor does the term have an art accepted meaning. Applicant argues that "wood-containing" should be understood to mean "a wood furnish with mechanical pulp." However, Applicant has not made anything of record which conforms or supports this definition. Furthermore, Applicant defines a "fine paper" as a wood-free paper, yet claim 6 claims a "wood containing" paper. Thus, it seems the terms are not mutually exclusive.
- 10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 1773

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 11. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The original disclosure does not describe to one of ordinary skill in the art how to determine the ISO brightness and the opacity. Applicant must supply the Office with a copy of the incorporated test standards that predates the filing date of the invention. Alternatively, the test methods must be incorporated into the specification.
- 12. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While the original disclosure teaches that calcium oxalate monohydrate with the claimed particle distribution may be utilized, it does not teach that any calcium oxalate with the claimed distribution may be used.
- 13. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the original specification for a paper comprising 91-100% calcium oxalate. The broadest support the examiner could find in the specification was on page 7, which teaches that the paper may comprise 1-90% filler.

Art Unit: 1773

Claim Rejections - 35 USC § 103

14. Claims 1-4, 5(1-4), 6(1-4), 7(1-4), 10 (1-4), 11 (1-4), and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al. (Pat. No. 5,92546) in view of SE8904337A (aka Carno). Matsuda teaches a paper and a method of making said paper which comprises a base paper and a coating (abstract). The base paper comprises pulp and filler (col 8, lines 1+), wherein the filler comprises calcium carbonate, silicates, inorganic fillers, and organic pigments (col 8, lines 1-7). Cellulose and mechanical pulps may be used. The coating comprises a binder and a pigment (abstract), wherein the pigment is selected from the group consisting of sodium chloride, potassium chloride, calcium chloride, sodium sulfate, zinc oxide, titanium dioxide, tin oxide, etc (col 8, lines 57-63). The paper preferably has an opacity of at least 90% (col 10, lines 1-9) and a brightness of at least 82% (col 10, lines 26-37).

Matsuda does not teach the addition of calcium oxalate to the pulp and/or coating of the paper. However, Carno teaches that calcium oxalate may be added as a filler or as a pigment to a paper product. The calcium oxalate has the property of bleaching formed colored structures and prevents light induced yellowing of paper pulp. Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to replace some of the filler/pigment taught in Matsuda with calcium oxalate in order to prevent light induced yellowing of the paper pulp.

With respect to claims 2, 7, and 12, the courts have held that a difference in concentrations or temperatures will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical.

Art Unit: 1773

'{W}here the general conditions of a claim are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation.'In re Aller, 220, F.2nd 454, 105 USPQ 233, 235 (CCPA 1955). In the current rejection, Carno teaches the addition of calcium oxalate to paper and/or paper coatings reduces light induced yellowing. Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to add calcium oxalate to the paper and/or paper coating in sufficient amounts in order to maximizing the paper's protection against yellowing while maintaining the desired opacity, brightness, and printing properties.

With respect to claim 14, the examiner takes the position that the combustion residue depends on the proportion of the calcium oxalate in the pigments and/or filler in the paper (see page 5, lines 11-13 of the specification). Since it would have been obvious to vary the amount of calcium oxalate in the paper/coating (as discussed above), the examiner takes the position that the limitations of claim 14 have been met.

Claims 1, 2, 4, 5 (1, 2, 4), 6(1,2, 4) 7 (1, 2, 4), 10 (1, 2, 4) 11 (1, 2, 4), and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Post et al. (US 4,445,970) in view of SE8904337A (aka Carno). Post teaches a fine paper suitable for offset and gravure printing containing 30-70wt% filler (abstract). The filler is utilized to reduce cost and to obtain certain optical and physical properties such as brightness and opacity. Suitable fillers include any material that is not water soluble such as clay, talc, titanium dioxide, aluminum hydrate, hydrated silica, calcium carbonate, etc (col 5, lines 51-56). Suitable pulps include chemical pulp and non-wood

Page 6

Page 7

Art Unit: 1773

pulp (col 8, lines 8-20). The paper preferably has a brightness greater than 80% and the opacity greater than 90% (see Tables VI-VIII).

Post does not teach the addition of calcium oxalate to the pulp and/or coating of the paper. However, Carno teaches that calcium oxalate may be added to paper as a filler. The calcium oxalate has the property of bleaching formed colored structures and prevents light induced yellowing of paper pulp. Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to replace some of the filler/pigment taught in Matsuda with calcium oxalate in order to prevent light induced yellowing of the paper pulp.

With respect to claims 2, 7, and 12, the courts have held that a difference in concentrations or temperatures will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. '{W}here the general conditions of a claim are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation.'In re Aller, 220, F.2nd 454, 105 USPQ 233, 235 (CCPA 1955). In the current rejection, Carno teaches the addition of calcium oxalate to paper and/or paper coatings reduces light induced yellowing. Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to add calcium oxalate to the paper and/or paper coating in sufficient amounts in order to maximizing the paper's protection against yellowing while maintaining the desired opacity, brightness, and printing properties.

With respect to claim 14, the examiner takes the position that the combustion residue depends on the proportion of the calcium oxalate in the pigments and/or filler in the paper (see

Art Unit: 1773

page 5, lines 11-13 of the specification). Since it would have been obvious to vary the amount of calcium oxalate in the paper/coating (as discussed above), the examiner takes the position that the limitations of claim 14 have been met.

Page 8

Claims 1, 2, 4, 5(1, 2, 4), 7 (1, 2, 4), 10 (1, 2, 4) 11 (1, 2, 4), and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampl Jr. (US 5,893,372 in view of (aka Carno). Hampl teaches a high opacity cigarette wrapping paper (abstract) wherein the paper comprises cellulosic pulp (col 6, line 17) and 20-40wt% white pigment (col 3, line 45). The paper preferably has a brightness of at least 70% and an opacity of at least 80% (col 3, line 24).

Hampl does not teach the addition of calcium oxalate to the pulp and/or coating of the paper. However, Carno teaches that calcium oxalate may be added to paper as a white filler. The courts held in *Sinclair & Carroll Co. v. Interchemical Corp* (325 Us 327, 65, USPQ 297 (1945)) that "Reading a list and selecting a known compound to meet a known requirement is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle." Thus, the court held the selection of a known material based on its suitability for its intended use supported prima facie obvious. Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize calcium oxalate as the white filler taught in Hampl because Carno teaches that calcium oxalate is useful as white filler in paper.

Furthermore, it is known in the art that it is desirable to add calcium oxalate to cigarette paper in order to improve taste and aroma (US 3,640,285-abstract), flame retardant (JP 52032975-abstract), and ashing (US 3,608,559 abstract).

Page 9

Art Unit: 1773

With respect to claims 11 and 15, the courts have held that "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose . . . [T]he idea of combining them flows logically from them having been individually taught in the prior art." In re Kerkhoven, 626 F2d. 846, 205 USPQ 1069, 1072 (CCPA 1980). Thus, the examiner takes the position that it would have been obvious to blend the white pigment taught in Hampl (eg. calcium carbonate) and the white pigment taught in Carno (calcium oxalate).

With respect to claim 14, the examiner takes the position that the combustion residue depends on the proportion of the calcium oxalate in the pigments and/or filler in the paper (see page 5, lines 11-13 of the specification). Since it would have been obvious to vary the amount of calcium oxalate in the paper/coating (as discussed above), the examiner takes the position that the limitations of claim 14 have been met

17. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampl, Post, or Matsuda, in view of Carno, as applied above, and further in view of Hampl (US 5,893,372) or Griffiths et al. (US 3,928,122). Hampl, Post and Matsuda, in view of Carno are relied upon as above. The references do not teach the importance of controlling the particle size of the calcium oxalate. However, Hampl teaches that particle size affects opacity, whiteness and brightness (col 4, lines 55-60). Griffiths similarly teaches that it is known that the opacity of a white filler is affected by its particle size (col 3, lines 50-58). The courts have held that a difference in concentrations or temperatures will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or

Page 10

Art Unit: 1773

temperature is critical. '{W}here the general conditions of a claim are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation.'In re Aller, 220, F.2nd 454, 105 USPQ 233, 235 (CCPA 1955). In the present application, Carno teaches the addition of calcium oxalate to paper as filler and/or pigment and Griffiths and Hampl teach that the particle size of such a filler/pigment is critical for controlling the whiteness, brightness, and opacity of the paper product. Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to optimize the particle size of the calcium oxalate pigment/ filler in order to control the paper's whiteness, brightness, and opacity.

Response to Arguments

18. Applicant's arguments filed May 25, 2001 have been fully considered but they are not persuasive. Applicant argues that the examiner has failed to establish a prima facie case of obviousness. Specifically, Applicant argues that the claims are directed toward a method of reducing a combustion residue, whereas the examiner's obviousness statement is drawn to a method of reducing yellowing. The examiner respectfully disagrees with Applicant's arguments. Claim 1 contains one method limitation-making a paper with a filler and/or coating pigment that comprises calcium oxalate. The prior art teaches such a method. Applicant's recognition of latent properties (aka a reduction in combustion residue) does not render nonobvious an otherwise known invention. *In re Wiserman*, 596 F2d 1019, 201 USPQ 658 (CCPA 1979). Furthermore, Applicant is reminded that the preamble of a claim is not limiting unless it breathes life and meaning into a claim. The examiner has interpreted the phrase "having a ISO brightness of 80% or more and an opacity of 80% or more" to give life and meaning to the claim because it

Page 11

Application/Control Number: 09/266936

Art Unit: 1773

clearly and distinctly describe the product that is made. However, since the prior art suggests such an invention, Applicant's arguments are not persuasive.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (703) 305-0025. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver, can be reached on (703) 308-1261. The fax phone number for the organization where this application or proceeding is assigned is (703)305-5436.

Page 12

Art Unit: 1773

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0651.

∠

∠

∠

Kevin R. Kruer

Patent Examiner

BLAINE COPEMHEAVER SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700